

VEHICLE INFORMATION / TEST SPECIFICATIONS

FMVSS No. 135
(Specify Units)

Vehicle Make/Model/Year: _____

MANUFACTURER RECOMMENDED BRAKE ADJUSTMENT PERFORMED AFTER 200 STOP BURNISH:

☐ Making stops, define: _____

BRAKE SYSTEM INDICATOR LAMP LABELING, OPERATION & IGNITION KEY CHECK:

☐ Single lamp

☐ Multiple lamps

CONDITION(S) INDICATED:

☐ Pressure differential or

☐ Drop in fluid level

LAMP ON AT:

Pressure _____

Pedal Force _____

OR

LOW FLUID:

Reservoir full _____

Lamp on at _____

Manufacturer recommended safe level of reservoir _____

ELECTRICAL FAILURE:

☐ Antilock

☐ Variable Proportioning

PARKING BRAKES ON:

☐ Ignition Key Check – All Lamps

☐ Yes

☐ No

ELECTRICALLY ACTUATED SERVICE BRAKES:

Failure of power source

☐ Yes☐ No**ELECTRIC TRANSMISSION OF SERVICE BRAKE CONTROL SIGNAL:**☐ Yes☐ No**EV WITH RBS, FAILURE OF RBS:**☐ Yes☐ No**POWER BRAKES:**☐ Not Available☐ Vacuum☐ Hydraulic☐ Power Assist Unit☐ Brake Power Unit☐ Accumulator☐ Electrically Actuated☐ Electrical Backup**MASTER CYLINDER PISTON DIAMETER:**

Primary _____

Secondary _____

SERVICE BRAKE PEDAL RATIO:

_____ to 1

PARKING BRAKE:☐ Front Wheels☐ Rear Wheels☐ Drive Shaft Brake☐ Service Brake Linings☐ Non-service Brake Linings**Note:** For non-service brake linings, submit a copy of the burnish instructions provided to vehicle owners.☐ Hand Control☐ Foot Control

Ratio _____ to 1

Parking Mechanism

☐ Yes☐ No

Describe: _____

PRESSURE VALVE:☐ Metering _____☐ Reblend _____☐ Proportioning _____

Ratio _____ to 1

☐ Variable Proportioning --☐ Mechanical☐ Electrical**Note:** For either, submit procedure to render inoperative: _____**HYDRAULIC SPLIT:**☐ Diagonal☐ Front/Rear☐ Other**ANTISKID SYSTEM:**☐ Not Available☐ 4-wheels☐ Rears Only☐ Other

Manufacturer _____

> **Submit procedure for rendering ABS inoperative** (provide sufficient detail for laboratory personnel including step by step, schematics, wiring diagrams, photos, etc...)

MASTER CYLINDER RESERVOIR:

Reservoir Capacity: _____

Fluid displaced new to worn linings: _____

Subsystem 1 capacity: _____

Subsystem 2 capacity: _____

Primary system fluid output for single stroke of master cylinder: _____

Secondary system fluid output for single stroke of master cylinder: _____

FOR VEHICLES EQUIPPED WITH REGNERATIVE BRAKING SYSTEM (RBS):

Additional Manufacturer Recommended Procedures:

- > ***Submit procedure for rendering RBS inoperative*** (provide sufficient detail for laboratory personnel including step by step, schematics, wiring diagrams, photos, etc...)
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FOR VEHICLES EQUIPPED WITH BATTERIES FOR PROPULSION OR BRAKING:

- > ***Submit procedure for depletion or disconnection of batteries*** (provide sufficient detail for laboratory personnel including step by step, schematics, wiring diagrams, photos, etc...)
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FRONT BRAKES:DRUM:

- ☐ Cast ☐ Composite
☐ Duo Servo ☐ Leading/Trailing
☐ Finned ☐ Leading/Leading

SIZE:

Drum Inside Diameter _____

LINING SIZE:

Primary Pad:

Length _____

Width _____

Thickness _____

Secondary Pad:

Length _____

Width _____

Thickness _____

Fully Worn Pad Thickness: _____

DISC:

- ☐ Cast ☐ Fixed Caliper
☐ Multi-piece ☐ Float Caliper
☐ Vented ☐ Pin ☐ Slider

Disc Diameter _____

Disc Thickness _____

Inboard Pad:

Length _____

Width _____

Thickness _____

Outboard Pad:

Length _____

Width _____

Thickness _____

Fully Worn Pad Thickness: _____

LINING INSTALLED DIMENSIONS (Nominal Production Values):

 Drum Shoe Cage Diameter _____
 (Outside Diameter of Shoe Cage Diameter)

 Diametral Clearance _____
 (Drum Diameter – Shoe Cage Diameter)

Disc-Clearance To Lining:

Inboard _____

Outboard _____

LINING CODES:

Primary _____

Secondary _____

Inboard _____

Outboard _____

LINING ATTACHMENT:

	BONDED	RIVETED
Primary	<input type="checkbox"/>	<input type="checkbox"/>
Secondary	<input type="checkbox"/>	<input type="checkbox"/>

	BONDED	RIVETED
Inboard	<input type="checkbox"/>	<input type="checkbox"/>
Outboard	<input type="checkbox"/>	<input type="checkbox"/>

Wheel Cylinder Diameter: _____

Caliper Bore Diameter: _____

Calipers Per Wheel: _____

Non-Service Parking Brake Type and Size (specify) _____

REAR BRAKES:**DRUM:**

- ☐ Cast ☐ Composite
☐ Duo Servo ☐ Leading/Trailing
☐ Finned ☐ Leading/Leading

SIZE:

Drum Inside Diameter _____

LINING SIZE:**Primary Pad:**

Length _____

Width _____

Thickness _____

Secondary Pad:

Length _____

Width _____

Thickness _____

Fully Worn Pad Thickness: _____

LINING INSTALLED DIMENSIONS (Nominal Production Values):
 Drum Shoe Cage Diameter _____
 (Outside Diameter of Shoe Cage Diameter)

 Diametral Clearance _____
 (Drum Diameter – Shoe Cage Diameter)
LINING CODES:

Primary _____

Secondary _____

LINING ATTACHMENT:

	BONDED	RIVETED
Primary	<input type="checkbox"/>	<input type="checkbox"/>
Secondary	<input type="checkbox"/>	<input type="checkbox"/>

Wheel Cylinder Diameter: _____

DISC:

- ☐ Cast ☐ Fixed Caliper
☐ Multi-piece ☐ Float Caliper
☐ Vented ☐ Pin ☐ Slider

Disc Diameter _____

Disc Thickness _____

Inboard Pad:

Length _____

Width _____

Thickness _____

Outboard Pad:

Length _____

Width _____

Thickness _____

Fully Worn Pad Thickness: _____

Disc-Clearance To Lining:

Inboard _____

Outboard _____

Inboard _____

Outboard _____

	BONDED	RIVETED
Inboard	<input type="checkbox"/>	<input type="checkbox"/>
Outboard	<input type="checkbox"/>	<input type="checkbox"/>

Caliper Bore Diameter: _____

Calipers Per Wheel: _____

Non-Service Parking Brake Type and Size (specify) _____

FMVSS No. 135 DATA SUMMARY - MANUFACTURER TEST RESULTS

(Use sample table below or similar to provide results)

MY: _____ / Make: _____ / Model: _____

GVWR: _____ LLVW: _____

TEST	Loading Condition	Specification and Limit				TEST RESULTS (In compliance if one stop meets requirement)		
		Speed (km/h)	Min. Pedal Force (N)	Max. Pedal Force (N)	Stopping Distance Requirement (m)	Shortest Stop Minimum Pedal Force (N)	Shortest Stop Maximum Pedal Force (N)	Shortest Stop Stopping Distance (m)
Vehicle Maximum Speed	LLVW							
Cold Effectiveness	GVWR	100	65	500	70 m			
High Speed Effectiveness	GVWR		65	500	speed dependant			
Stops with Engine Off	GVWR	100	65	500	70 m			
Cold Effectiveness	LLVW	100	65	500	70			
High Speed Effectiveness	LLVW		65	500	speed dependant			
Failed Antilock	LLVW	100	65	500	85			
Failed Proportioning Valve	LLVW	100	65	500	110			
Failed Hydraulic Circuit #1	LLVW	100	65	500	168			
Failed Hydraulic Circuit #2	LLVW	100	65	500	168			
Failed Hydraulic Circuit #1	GVWR	100	65	500	168			
Failed Hydraulic Circuit #2	GVWR	100	65	500	168			
Failed Antilock	GVWR	100	65	500	85			
Failed Proportioning Valve	GVWR	100	65	500	110			
Signal Transmitted Electrically, RBS, Electrically Actuated Brakes								
Power Brake Unit Failure	GVWR	100	65	500	168			
Depleted EV batteries								
Parking Brake - Uphill	GVWR	B	B	B	B			
Parking Brake - Downhill	GVWR	B	B	B	B			
Hot Performance Stop #1	GVWR	100	65					
Hot Performance Stop #2	GVWR	100	65	500	89			
Recovery Performance Stop	GVWR	100	65					